

Scaled data based on original data using

LM-41-14 Approved Method for Photometric Testing Of Indoor Fluorescent Luminaires

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: io LED

Report Number: P211714

Luminaire Tested: **LE\_4B20D010 EC4B10208040 4LBN1MW**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P211714  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P35319)  
Test Lab: INNOVATION CENTER-P3  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: io LED  
Catalog Number: LE\_4B20D010 EC4B10208040 4LBN1MW  
Description: PORTFOLIO 4 INCH CYLINDER  
NARROW DISTRIBUTION WITH MATTE WHITE TRIM  
WATTAGE D010TR-21.86W DE010-20.46W D5LT-21.24W DMX-20.89W DL2-22.5W  
DL3-21.8 6W DLE-22.46W  
Light Source: HIGH LUMEN LED  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1735.9 lumens  
Efficiency: N/A  
Efficacy: 83.5 lumens/watt  
Spacing Criteria (0/90/45): 0.96 / 0.96 / 0.95  
Luminous Opening: Point Source (0' x 0' x 0')  
CIE Type: Direct

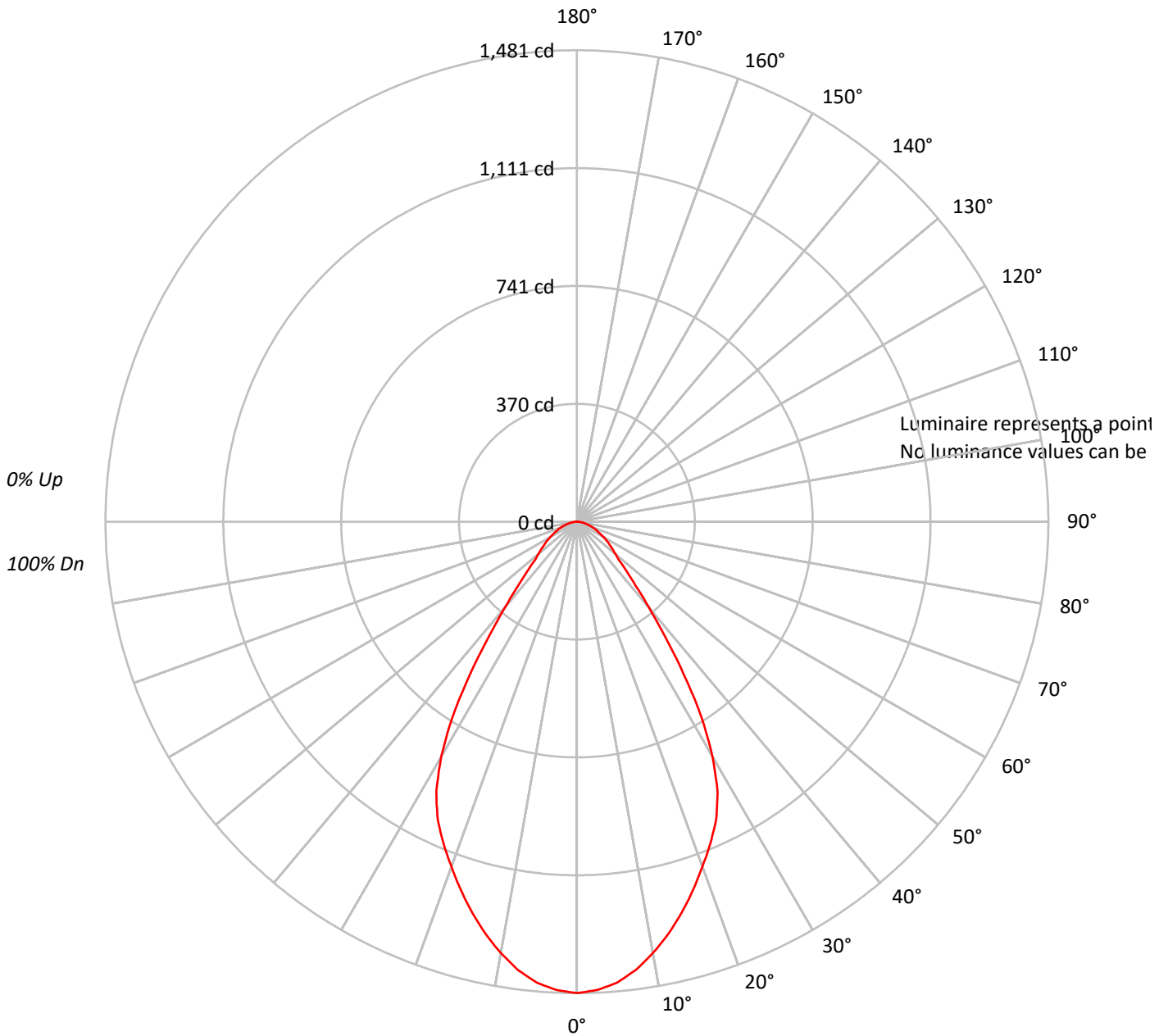
Input Watts (W): 20.8  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Luminous Intensity Polar Plot





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**COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:**

RF	20				20				20				20				20				
RC	80				70				50				30				10			0	
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	0
RCR																					
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100			
1	112	109	105	103	109	106	104	101	102	100	98	98	97	95	95	94	92	90			
2	105	99	94	90	103	97	93	89	94	90	87	91	88	85	88	85	83	81			
3	98	90	84	80	96	89	83	79	86	82	78	84	80	76	81	78	75	73			
4	92	83	76	71	90	82	76	71	80	74	70	78	73	69	76	72	68	67			
5	87	77	70	65	85	76	69	64	74	68	64	72	67	63	70	66	63	61			
6	82	71	64	59	80	70	64	59	69	63	58	67	62	58	66	61	58	56			
7	77	66	59	54	75	65	59	54	64	58	54	63	57	53	62	57	53	52			
8	73	62	55	50	71	61	55	50	60	54	50	59	53	49	58	53	49	48			
9	69	58	51	46	68	57	51	46	56	50	46	55	50	46	54	49	46	44			
10	65	54	48	43	64	54	47	43	53	47	43	52	47	43	51	46	43	41			

**AVERAGE LUMINANCE (cd/sqm):**





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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	136.2	7.8
10°-20°	356.5	20.5
20°-30°	469.1	27.0
30°-40°	365.2	21.0
40°-50°	177.4	10.2
50°-60°	112.0	6.5
60°-70°	72.3	4.2
70°-80°	37.8	2.2
80°-90°	9.4	0.5
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	961.8	55.4
0°-40°	1327.0	76.4
0°-60°	1616.5	93.1
0°-90°	1735.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1735.9	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	1481	
5°	1453	136
15°	1271	356
25°	1034	469
35°	585	365
45°	221	177
55°	124	112
65°	72	72
75°	36	38
85°	8	9
90°	0	



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**CANDELA DISTRIBUTION (FULL):**

0°	
0°	1480.9
2.5°	1472.6
5°	1453.4
7.5°	1420.2
10°	1376.1
12.5°	1326.5
15°	1271.4
17.5°	1213.4
20°	1152.7
22.5°	1094.8
25°	1034.1
27.5°	956.9
30°	852.1
32.5°	728.0
35°	584.6
37.5°	452.3
40°	350.2
42.5°	273.1
45°	220.6
47.5°	179.2
50°	157.2
52.5°	140.6
55°	124.1
57.5°	110.3
60°	96.5
62.5°	82.7
65°	71.7
67.5°	63.5
70°	52.4
72.5°	44.1
75°	35.8
77.5°	27.6
80°	19.3
82.5°	13.8
85°	8.2
87.5°	2.8
90°	0.0



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— 0°-180°







(END OF REPORT)